IN THE ABSTRACT

Please amend the abstract as follows.

Disclosed are methods and apparatus to control ~~the~~ actions of a user terminal (UT) located at a remote location, possibly far from a gateway (GW), which has an interface to the Public Switched Telephone Network (PSTN) and/or to the Internet. The methods and apparatus provide for operation of a mobile satellite communication system having at least one gateway (GW), at least one user terminal (UT), and a constellation of satellites. The methods and apparatus allow access to the communication satellites by specifying an exclusion zone having a confidence limit (CL) associated therewith. The methods and apparatus selectively provide service to a UT depending on a determined location of the UT relative to the exclusion zone and on an estimated error (E) of the determined UT location, wherein location of the UT is determined by the UT, and transmitted to the GW, or location of the UT is determined by the GW. ~~A computer generated and stored database of an area (referred to as a Confidence Polygon), a volume (referred to as a Confidence Volume), and/or a plane (referred to as a Confidence Surface) is used to establish a geometric shape located on the earth, above the earth or in space, or combinations thereof. In addition, there is assigned to these areas, volumes and/or planes a static or a variable value referred to as a Confidence Limit (CL) that can be compared to a value of an error (E) in a position location of the UT. The error signal can either be generated by the UT or by the GW. A controller, preferably a part of the GW, acts upon the database of the geometric shapes, and the assigned or derived values of CL and E, to determine if the comparison of CL and E, combined with the current position of the UT, yields a certain result according to the operational mode of the GW controller. There can be many operational modes of the controller. Depending on the operational mode the result of the comparison of the CL assigned to the area, volume or plane is used to affect control of the UT or an external device attached to the UT. By example, the UT may be forbidden or allowed to access the system or to make or receive a call, or some operational characteristic(s) of the UT may be specified, such as transmitter power, frequency, and the like. The end result is an ability to provide protection for a site, such as a radio astronomy site, from UT emissions.~~